Professor Craig—That is a hypothetical question. The very fact of the orchard being isolated from other trees—

The President (interrupting)—Is the orchard you have in your mind, Mr. Roy, when speaking about applying wood ashes on virgin soil, entirely isolated?

Mr. Roy—There are no old orchards within four or five acres. There is no spot on either the leaves or the fruit, which may, or may not, be due to the ashes.

Professor Craig—Mr. Roy's idea is that the virgin condition of the soil is necessary to give healthy trees and fruit; but there is another element in the soil, the original vegetable humus, which is dispersed by plant growth. Without knowing exactly what benefit it is, we know that it has a very advantageous effect on plant growth, and that it gives us healthy trees.

Mr. J. C. Chapais—Do you think that if we manured heavily with ashes such a spot as the Island of Montreal would escape the spot disease?

The President—How is the disease spread?

Professor Craig—It is spread by means of minute seeds, or spores, which lodge on the dead leaves. They live on the young wood and leaf buds, or wherever they can find foothold under favorable conditions. We know they can live from year to year—live in the old apple barrels, perhaps on the apples themselves, and on the wood and bark of everything. The first spraying is one of the most important of the whole season, because, using copper sulphate at that time, we can use it much stronger than at a later period, when the foliage is on the trees. One of the most important things to do is to give the trees a good spraying with copper sulphate in the spring. If you are so busy in the spring, and can do it better in the fall, you will get sufficient benefit to pay you for the work. I think that the best time for spraying is as soon before growth as possible, because you will be likely to destroy a greater number of spores, and then go on with Bordeaux mixture.

A voice—What do wood ashes cost, Mr. Roy?

Mr. Roy—I got a load last year, and they cost me $10 a ton.

Mr. Brodie—What percentage of potash was in them?

Mr. Roy—I didn't have them analysed, but I took a gallon of ashes and made a gallon of lye, and it was strong enough to spread easily. Over seventy-five carloads of ashes pass through here every season from Ontario. I think they are the best fertilizer a man can buy to put on almost any land.

Mr. Barnard—In Quebec they are very particular to keep the ashes in the stove for six weeks, and in that way they weigh very much more per bushel than if taken away at once. An analysis which we had made at St. Hyacinthe gave a smaller percentage of potash than one made at Lansing, Mich. At St. Hyacinthe no particular care was taken in burning the ashes, and, whilst they showed 7 to 7½ per cent. of potash, those at Lansing showed 11 per cent.